

What is claimed is:

1. An automated lance system which can perform lancing along the annulus of a steam generator with a tube array of a triangular pattern
5 and which comprises, in combination, a lance body which comprises a nozzle block, which comprises a circular nozzle cylinder and a first drive means to make the sweeping motion of said circular nozzle cylinder, and a second drive means to adjust the direction of nozzle jets from said circular nozzle cylinder by rotating said nozzle block in the horizontal plane, a rigid guide support rail which comprises two parallel circular rods which extend circumferentially along said annulus of said steam generator and whose ends are tightly fastened inside the hand hole of said steam generator, and two side support wheels attached to the outer side of said lance body, and
10 15 two control cables attached to both the front and the rear plates of said lance body, said articulated body being driven by a drive means, resulting in the transportation of said lance body along said rigid guide support rail.
- 20 2. The system of claim 1 in which said rigid guide support rail comprises several segments, being fabricated inside said hand hole and having a control cable penetrating into said segments to tightly link together said segments, having sufficient stiffness to sustain the repulsive forces caused by said nozzle jets of the high pressure
25 water.
3. The system of claim 1 in which said side support wheels are attached to said lance body with some flexibility in the length by a spring, taking into account of roughness of the inner wall

of said steam generator.

4. The system of claim 1 in which two control cables attached to both ends of said lance body are driven by a drive means with a
5 drum which is stationed outside said hand hole.

5. The system of claim 1 in which said lance body is designed to have a curved shape in order to move well along said rigid guide support rail

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